

Aviation News

McGraw-Hill Publishing Company, Inc.

OCT. 7, 1946

★
TV Design Helped Make Record

Truculent Turtle sets long distance mark of 11,260 miles from Australia to Columbus, Ohio, non-stop.....Page 7

★
Consider Regulating Nonscheds

State aviation officials believe some economic regulation in order, NASAO convention reveals.....Page 10

★
Two-Place Four-Place Personal Plane

Weatherly-Campbell a 111 metal design to cruise at 140 mph.; uses Lycoming 190 or Continental 185 hp. engine...15

★
Northrop Pioneer For Export

Trimotored cargo plane to make first flight in November; Frye credited with idea to develop freighter.....Page 21

★
French Push For Export Markets

Nationalized plane factories trying to overtake world development; models designed after U.S. types.....Page 28

★
Lonanza Seen In Garment Trade

New York apparel industry can provide 6,000-lb. payload for three C-47s daily to Florida and West Coast....Page 33

★
CAB Rejects AA-MCA Merger

Board says eventual disadvantage to transport system outweighs benefits through fuel pay savings.....Page 35



Curtiss' Swept-Back Blades: In an attempt to push blade speeds into the transonic range, Curtiss-Wright Corp. has developed this swept-back propeller for AAF. With it, the manufacturer claims propeller-driven aircraft can attain speeds perhaps as high as 700 mph. The propeller is mounted on a Republic P-47, indicating it is designed to absorb approximately 2,000 hp. (Story on Page 10)

For small fire hazards, too...



...it's **Kidde** for protection!

THE KIDDE LINE OF AIRCRAFT PORTABLES

MODEL 2TA Carbon dioxide capacity 2 lbs. Average charged weight with bracket, 7.25 lbs. Mounting space required for extinguisher and bracket: height, 16 in.; width, 9 1/4 in.



MODEL 4TA Carbon dioxide capacity 3.62 lbs. Average charged weight with bracket, 10.25 lbs. Mounting space required for extinguisher and bracket: height, 21 3/8 in.; width, 9 1/8 in.



MODEL 5TA Carbon dioxide capacity 5 lbs. Average charged weight with bracket, 15.9 lbs. Mounting space required for extinguisher and bracket: height, 17 1/2 in.; width, 10 1/8 in.



On many a farm transport, Kidde carbon dioxide extinguishers safeguard the power plant against fire.

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Walter Kidde & Company, Inc.
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THE AVIATION NEWS

Washington Observer



THE SAME OLD STORY—Signs of discontent among pilots are already in evidence, more and more of them. Aircraft industry is becoming concerned over references by government fiscal officers to the cost of defense. At the same time, contractors were told, they have been more to the point; that national defense expenditures over the only area where stable economy can be made. Of course, these spokesmen always consider the three billion dollar national debt pay as a "national defense" issue. Actually, 1947 defense appropriations were about \$15 billion, of which less than \$2 billion were for AAF and the Navy's Bureau of Aeronautics.

INCREASING THE PRESSURE—Increasing emphasis is laid on additional preparations by the AAF. Here is an example you may have missed. Brig. Gen. John C. Gordon, of Wright Field, was scheduled to address the Los Angeles meeting of the SAE on the subject last week. However, at the last moment he withdrew because of "urgent military commitments" and his place was taken by Maj. Gen. E. M. Powers, chief of material for the AAF. Efforts to get a definition of such commitments failed. Observers speculate that Powers' substitution was made to give the speech even more emphasis, counting on it did from an officer of even higher rank.

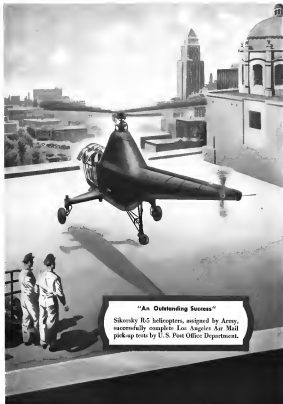
QUEE ON AVIATION DISPOSAL—The House Committee on Investigation, Surplus Property Disposal, headed by defeated Missouri Congressman Slighfield, will make a detailed investigation of aircraft and parts disposal before year's end. Supposing that it would withhold recommendations for legislative changes in surplus property disposal law until it had covered more territory, the committee asserted that three fundamental and obvious conditions in WAA present orderly disposal in all cases: (1) Complete change of personnel and policy matters; (2) Investigations ordered by WAA over regional offices, causing or permitting confusion, favoritism and fraud; (3) Costly warehousing and loss of profitable markets due to delay in moving surplus property.

INDUSTRY MOVES TO WASHINGTON—Excess to which the industry is moving to Washington is indicated by recent removal and building construction. American Airlines is moving into its own five-story structure on downtown K Street. TWA has leased a twelve-story, million-dollar building at 11th & M Sts., which it under construction. TACA recently moved its expanded quarters on Connecticut Avenue. Air Transport Association is occupying increased space in its new location. Consolidated Value has new ground floor space in a K St. building.

CAB DISCLAIMS CARRIER PARITY PLAN—For months American Airlines has referred to a lengthening list of CAB decisions which have steadily increased its competition from other airlines which were granted new routes and new routes. As a result, American's leadership in route miles has steadily diminished. Was the Board taking this action because it thought American was too big? Or because it sought a national system of routes more nearly equal in size? The Board partly answered these questions in its rejection of the American-Mid-Continent merger. It was careful to point out that it does not consider American "too big in an absolute sense," and denied the impossibility of placing a top limit on the size of any air carrier. The Board added that it does not feel, either, "that we should serve toward an ultimate goal of parity among air carriers." It emphasized that in its opinion "the currently unregulated nature" of the proposed combined system simply would offset the benefits that might result.

ARGUMENT AGAINST UNIFICATION—One of the aspects of the performance of the Lockheed P7F last week (see page 7) that was not lost on observers in Washington was that the development of the plane was sponsored by an uncommitted Navy, that has been accused of throwing failure attribution of aviation. The Army, at least as far as it is known, has no plans of commencing its own competition with the Lockheed-built Neptune. This recalls the historic fact that the Army sponsored development of liquid-cooled engines and the Navy continued development of air-cooled engines, with the result that the U. S. is well equipped in both fields.

MORE EMPLOYEES TO AID CAB—Prospects that CAB may be able to dig out from under an unprecedented backlog of consumer complaints and accident investigations have been brightened by new personnel cuttings set by the Bureau of the Budget. Quota for the new quarter beginning Oct. 1 is 525 employees. This compares with 510 during the quarter just ended and 435 up to June 30. The Safety and Economic Bureau, General Counsel's Office, and the Office of Trial Examiners, all of the Board's divisions, will benefit from added clerical and technical staff. CAB recently had pending a total of more than 1020 economic proceedings. Accident cases, both pending and completed, are at a new peak. They have risen from a wartime monthly average of about 400 to 495 in January 1945 to April, 694 in May, 709 in June, 1015 in July and 1019 in August.



Lockheed Neptune Record Flight Reveals Efficiency of New Design

Backing headwinds, the Navy's Truculent Turtle sets long distance record of 11,260 miles from Perth, Australia, to Columbus, Ohio, enroute; lifted 30,400 lb. of gas on takeoff

By WILLIAM KROGER

Spectacular performance of the Lockheed-built P2V Neptune Navy patrol bomber in flying more than 11,000 miles nonstop from Perth, Australia to Columbus, Ohio, last week leads to analysis of the plane's design which, in the long run, overrids the important new world's record the Truculent Turtle established.

Engineers are freshy re-interpreted at the results achieved by the Neptune, while at the same time finding solid aerodynamic reasons why the P2V could be expected to perform as it did.

At take-off, the Turtle weighed 30,000 lb., a wing loading of 83 lb per square foot, probably the greatest load, experimentally, any airplane has ever lifted. (Normal gross is 20,000 lb. and wing loading 58 lb.) It got off from a 6,000-ft. runway, set in itself an un-

usual feat as it used zero winds (the actual stage of the flight it managed to stay aloft). It was carrying 30,400 lb. of gasoline, or about one and one-half times its own weight. (The Boeing B-29 normal wing loading is 69 lb., a Douglas C-54, 35 lb.)

► **Cleaned Wings**—This is explained by engineers with the simple statement that the P2V, aerodynamically, is perhaps the cleanest airplane ever built. Another factor is an unusually high sweep ratio (ratio of the span to the chord of the wing) of 10. (The Consolidated B-24 and Northrop B-35 are believed to be the only large airplanes with a higher ratio, 11.)

The sweep of the P2V has its greatest effect on the one thing the plane was designed to achieve: long range, not necessarily speed

It permits maximum results on low power.

The Neptune is nearly a year old. The first plane was delivered to the Navy last December. There are now seven flying for the Navy and a sizable new order is pending.

► **Speckles on Wings**—This leads to speculation as to how much further aircraft design, particularly wing design, has progressed and what may be expected in the future. Implications for commercial transports are startling. The P2V is powered by two 2,500 hp Curtiss-Wright 2300 engine driving Hamilton Standard propellers. Qualified engineers state that a transport modeled after the P2V, and with higher powered engines, would service some range, but could still carry more passengers further and faster than any other transport of comparable size either flying or contemplated.

Much of the success of the Neptune as a long-range, weight-lifting airplane is due to the wing. On it, government and Lockheed engineers lavished exceedingly rare over a period much longer than that generally devoted to aircraft design. It is a special type of semi-high wing developed by the National Advisory Committee for Aeronautics. It is equipped with



Analyst's D6 II. The clean design of Navy's P2V Neptune, the Truculent Turtle, combined more than any other single factor to its record-breaking

flight of 11,260 miles, according to engineering opinion. The Turtle, when it landed at Columbus, had 100 gal. of fuel remaining.

Power flaps similar to those used on Lockheed's Constellation.

► **Proving Re-Inspection.** In retrospect, the 15,280 miles from Australia was a proving run, sufficient to convince even skeptical engineers that this is an airplane the like of which probably has never before been built.

As originally planned, the plane was to fly a single bending course using pressure-panel revisions (Aviation News, Sept. 30). This would give it constant tailwinds and put a large stress on the model for the distance on that navigation system.

It was found impractical to use this system except for one very short interval. Following a single heading depended upon the radio altimeter which did not function above 8,000 ft. Most of the flight was between 8,000 and 12,000 ft. The Turtle did not get the expected tailwinds and hatched headwinds a considerable part of the time. The crew felt confident—and apparently with some reason—that if they had had the predicted tailwinds they could have flown on so Rome.

This flight surpassed by more than 2,000 miles the previous record, established last year by a B-28 with a T-101-1014 flight from Guam to Washington. Engineers do not believe there is enough

Dressbust Leaks
The pressure pattern, angle heading method of navigation which was scheduled to get its first proving test on the Treadwell Turtle flight, will be employed by the B-28 Dressbust on its proposed Guam-Guam, 3,000-mile flight. Although the ocean gives altitude by the delay in the Dressbust flight in weather, actually, looking for land just west prevented start of the hop.

open in the B-28 that last week was proved at Guam for an anticipated flight to Guam to hold sufficient gas to out-range the B-2V Neptune.

► **Navy Plans—**The Navy had yet to be pleased with the performance of the Turtle. Cmdr Thomas D. Davis, skipper of the plane, declared today it demonstrated the feasibility of a tactical patrol mission of similar length. Because of the sketched gas load carried on the round flight, the plane's range on a tactical mission would be considerably less. However, it is believed well within its capabilities to range 6,000-7,000 miles.

Physically, that is also possible

Davis and his crew, Cmdr Kayser P. Rankin, Cmdr, Walter S. Ward and Lt. Cmdr Ray H. Tolberg, were in top physical condition at the end of the 55-hr, 15-min flight. They were up to flight standard, reactions normal and there was no undue fatigue. Each of the men averaged about 20 hrs sleep. All this was due to several innovations, tried for the first time on this flight.

Probably number one—and potentially useful commercially—was a new type of heading aid attached to the sun which took the place of radio compass. This gave equivalent radio reception and eased its disconnect. Davis stated that the wearing of carburetors, such as long flight is a major cause of pilot fatigue.

Contributing also to the physical condition of the men were washing and shaving facilities on the plane. Davis is so satisfied and, above, the crew had, had surprising results from the physical standpoint.

High degree of performance of the Wright engine on the flight was indicated by the fact that they were not even given a check at Columbus, after the plane landed, before a relief crew took the Turtle off to fly in Washington. This is the same type of engine installed in the Constellation and the efficiency of which was under question at one time during the Presidential of the Constellation in August.

De Havilland Death
Theory that Geoffrey de Havilland, one of the aircraft designers present and Helms's leading test pilot, was a victim of the over-engineering effort occurring in high speed flight is given strong support in U. S. engineering circles. In the haste of press accounts of the accident which killed de Havilland, authorities express the opinion that a wing was torn off de Havilland's experimental tailless jet plane, the Showlow. It is presumed this was followed almost immediately by disintegration of the plane.

De Havilland, 51, was the chief test pilot of his father's company and as such made the initial flights in the Mosquito. Harold Gove and the "Vampire" jet plane. One outstanding feature was a shock routine with the 500 mph plus Vampire.

Engine Price Boost
A general price increase put into effect Oct. 1, by Continental Motors Corp. as its light-plane engines, was expected to result in additional low price increases on a number of personal planes since Continental is the largest single supplier of light-plane engines. It is understood, however, that some of the light-plane manufacturers, feeling that higher prices are undesirable at this time are planning to absorb the additional expense in their own price with not passing it on to dealer and customer.

Adel Products Gain In Aerco Corp. Deal

Adel Precision Products Corp., Berkeley, may be considered to have strengthened materially its position in manufacture of aircraft and industrial hydraulic units last week by its acquisition of Aerco Corp., Hollywood, Calif., which will function as an Adel subsidiary.

Both are owned by Trans-American Corp. and the merger gives Adel direct access to the heavier hydraulic cylinder manufacturing equipment owned by Aerco, a plant employing 150 workers. Indirectly, Adel's acquisition of new hydraulic facilities should be viewed as a sign of confidence in the immediate future of the nation's personal airplane industry, the west coast company being recognized as an increasingly active producer of landing gear and hydraulic system components for light aircraft.

As a result of the merger, Clinton E. Shryver, Adel president, will be president of Aerco and the latter company's former president, Timothy Colton, will be retained to direct engineering and sales.

Conna Back
TWCA has put its Constellation back on domestic service, but time they have done transiently since the July 11 grounding. First schedules were between New York and Los Angeles with stops at Chicago and Kansas City. Subsequent flights were made in 8 hr. 45 min., westbound in 11 hr. The flights will be extended to San Francisco Oct. 12.



NOVEL RUSSIAN 'COPTER'
Shenov publicly for the first time during Soviet Aviation Day in Moscow recently, where it won a Stalin prize, the new four-engine rotor war craft is said to have been designed by Prof. Yurys and an assistant, I. Bratskiy. Said to incorporate good stability, craft also can be landed safely with dead engines by means of auto-rotation. It's further disclosed that designers are working on freight and passenger and personal "loggers" (Soyuz)

Dawson is New Head Of Cab Safety Bureau

Two important changes on CAE's staff have brought a new man to head the Safety Bureau and the transfer of another from the General Counsel's Office to the Economic Bureau.

Wallace A. Dawson, formerly of Eastern Air Lines, has succeeded Joseph B. Durbewitz as director of the Safety Bureau. Dawson was a pilot with Eastern from 1933 to 1942, and check pilot after his return from the Army in 1945.

Lois W. Goodrich, former assistant director, director of the Economic Bureau, succeeding Robert W. Oliver, who resigned to become a partner in the Washington law firm of Fogel and Neal. Fogel is a former chairman of the Board and Neal former general counsel. A former Assistant U. S. Attorney for the Southern District of New York, Goodrich joined the current staff in 1942 in that capacity. He has been chief of the rates division and the interlocking relationships and control unit.

Airlines Joint Corp.

The new Airlines Terminal Corp. (Aviation News, Sept. 30) will put its joint terminal service in operation as soon as possible, perhaps by the end of this month. While locations have not been announced, that probably will be at Willow Run, Detroit, and Kenosha County Airport serving Okauchis

Directors of the corporation are C. B. Smith, chairman of the board; Arthur B. Brattain, first vice-president; Eastern, A. M. Jett, Jr., secretary; TWA, Bedford Martin, president; PCA, Roy Ireland, vice-president; administrative, United, C. E. Woodman, president and gen. mgr.; Delta, Tom Brandt, pres.; Eastern Express, Lewis, pres.; Air Transport Association, Robert Rasmussen, exec. vice-pres.; ATA

Culver Shift

Van Groot, largest stockholder in Culver Aircraft Corp., Wichita, recently became president of the corporation, succeeding F. Woodbury. His brother-in-law Woodbury is taking a sabbatical prior to announcement of new new connection.

Grant declined to comment on industry reports that the Culver corporation is planning to switch to all-metal construction aircraft plants. The current two plants are at Culver, Ind. V. S. and each Culver plane has been made of plywood construction.

Representatives of the Culver engineering department reviewed, when Al Moore, chief company left, and several industrial engineering experts, headed by Jack Ruppe, formerly of Globe Aircraft and North American Aviation, viewed the corporation, it is claimed by observers in support of the reported forthcoming switch.



GETTING ACQUAINTED WITH JET PROPULSION
Parks College of Aeronautical Technology of St. Louis University (formerly Parks Air College) is believed to be the first college to acquire a jet-propelled plane for cross-country engineering studies. Views are students entering a surplus Bell-built P-39 at Parks College, East St. Louis, Ill.

earlier as the publishing company's executive vice-president. He was a retired vice-president of United Air Lines.

Other recent resignations were Helen L. Walsh, managing editor of the Directory, Sydney Corlier, transport engineering editor of the magazine, William Thompson and George Brawley, magazine news editors; and Agnes A. Gustafson, director of research. All resignations except the three listed openings have been replaced.

National Air Clinic Set for Oklahoma City

National Aviation Clinic, meeting in Oklahoma City Oct. 14-17, for the first time will feature a series of about "introductory" courses for delegates as part of the general plan of making the Clinic an aviation forum.

To be held the afternoon of Oct. 16, the courses will be given by four educators: Dr. M. C. Righthart, Jr., director of Air Age Educational Research, New York City, speaking on public school aviation education; Lynn Bolinger, of Harvard University, a subject in aerospace; Stanley Berg, Northwestern University, an extensively air-park; and Robert Cox, University of Southern California, an extensively field for air service.

As in previous years, general co-chairman of the Clinic will be

president of the National Aeronautic Association, this year L. Welch Pogue. NAA's co-chairman with the Oklahoma City Chamber of Commerce is the Clinic. Oklahoma's Governor Robert S. Kerr is general chairman.

Chairman of the resolutions committee is W. Percy McKeon, Memphis; Yvon Glen B. Kurbury, Los Angeles, is chairman of the credentials committee; John Hill, New York City, is chairman of the public relations committee; and Lauren D. Lyman, Bridgeport, Conn., chairman of the program committee.

Visiting delegates to the Clinic will be invited to 50, one half from the aviation industry, the other half from the public.

Bowen Named to Post With Fairchild E&A

Succeeded Paul Fricke as assistant general manager of aircraft division at Hagstrom, Cooper treasurer of C & S.

Kenneth F. Bowen has been appointed assistant general manager of the aircraft division of Fairchild Engine and Airplane Corp. at Hagerstown, Md.; it has been announced by Richard S. Boulton, vice-pres and gen. mgr.

Bowen had been with North American Aviation for 15 years prior to assuming his new position

with Fairchild. He was project engineer for the P-81, ST-9 and the Skyrocket, a member of Rockwell, has been an aviation engineer with the Blackburn Aircraft Co. and came to the United States in 1928, working with Keystone Aircraft Corp. and Berliner-Joyce Corp. before joining North American.

At Fairchild Bowen succeeds Paul J. Fricke who has resigned to enter another business.

Other personnel changes are:

Chicago Air Station—Wm. J. Kelly, who has been general manager, Chicago, has been named manager of United Aircraft Division, Chicago, and has been named manager of United Aircraft Division, Chicago, and has been named manager of United Aircraft Division, Chicago.

London—Wm. J. Kelly, who has been named manager of United Aircraft Division, Chicago, and has been named manager of United Aircraft Division, Chicago, and has been named manager of United Aircraft Division, Chicago.

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How hot air makes some aviation oils eat metal

These strips of copper-lead bearing metal have been cooking in hot, sea-blown engine oil. Under these conditions (which often occur in aircraft engines) some oils become corrosive to alloy bearings. The pitted strip gives you a very good idea of what happens to your engine's bearings when they do.

Now see how RPM Compounded Aviation Oil protected the other strip against corrosion. It had the same hot-air treatment, but it's still smooth and uncorroded—thanks to an anti-corrosion compound blended into "RPM."

"RPM" is also compounded to stop hot-spot wear, to prevent harmful gum and carbon deposits, foaming and sludge. To keep all of your aircraft engines younger longer, switch to "RPM" now.



ANOTHER CONVENIENCE FOR PRIVATE PILOTS—Chevron National Gift Cards are good in gold throughout the U.S. and Canada. If you haven't one already, write Standard of California, 225 Bush St., Room 1668, San Francisco 20, California, or ask the Standard Airport Dealer at your field for an application blank.



NACA'S GUINEA PIG SHOOTING STAR:

Testing flight characteristics of high-speed aircraft, Maximal Admiration Committee for Aeronautics has roped a P-51 with various instruments. Shows are an ever-use point take in the case and a pressure canopy risks aft of the trailing edge of the wing. Principal function of the point measuring angle of attack and yaw indicator is to make possible a fast

history of maneuvers, that is, how long a certain degree of aileron movement must be maintained to perform a certain maneuver. The rake measures the drag of the wing. It is connected with instruments inside the plane that show the variation of air pressure on the wing as the plane goes through maneuvers. (NACA photos)



"Cabin Comfort" for Jet Fighters



AiResearch provides full, automatic control of cockpit pressure and temperature

A difficult problem in jet conditioning is inherent in jet airplanes — it is that of controlling the heat caused by compression and high speed. Operating at high altitudes, the planes must be pressurized, but the only compressed air available comes directly from the jet engines — at temperatures above 400°F. Added to this is the great heat generated in the fuselage by jet engines due to high speed. Before this hot, compressed air reaches the cockpit, it must be cooled to no less than 40°F.

With "Cabin Comfort" systems, including pressurization and cooling, AiResearch solves this and other problems of air conditioning for designers of all types of new airplanes. All parts, models and accessories are provided for complete installation.

AiResearch leadership in aircraft air control is backed by seven years of pioneering research and production. Call upon this unique background to solve your AIRCRAFT air conditioning problems. AiResearch Manufacturing Company, Los Angeles 45, California.

• AiResearch "Cabin Comfort" equipment will condition the most difficult installations, in 3½ to 40,000 feet, and the narrow planes of Conquest, F4U, Mustang, North American, Republic, Northrop.

Sales Representatives: NEW YORK, Aero Engineering, Inc., Suite 1914, 169 Broadway • CLEVELAND, Aero Engineering, Inc., 1811 Huron Avenue • SEATTLE, C & H Supply Company, 3730 First Avenue South • WICHITA, H. E. Chapman, 213 East Gilbert

MIDWEST TURBINE COOLS AIR 140°F.

Revolutionary development in the jet fighter "Cabin Comfort" system is the 2½ inch Allison turbine turbine. Operating at speeds up to 120,000 RPM, it cools air 140°F at 7 lbs. air flow per minute. Modelled AiResearch Part



AiResearch
A DIVISION OF
THE GARRITT CORPORATION

PRIVATE FLYING

Weatherly-Campbell Develops New Four-Place Personal Plane

All metal monoplane based on design by Don Luscombe and Fred Knack scheduled to cruise at 140 mph, and sell for \$5,000. Uses either Lycoming 100 or Continental 185 hp engine.

By ALEXANDER MCKEY

A four-place, all-metal, high-wing personal plane developed by Weatherly-Campbell Aircraft Co., Dallas, Tex., was announced last week, and is due to go into production early in 1947, with a tentative price of \$5,000.

Performance data, based on actual flights which began last December, indicate the plane, which was under 2,100 lb. Gross weight at 125 by Continental engine, will cruise at 140 mph at 2,800 ft with 140 hp and 140 speed and 750 mile cruising range at the same altitude. With full tanks and radio the plane will carry four persons (410 lbs.) plus 120 lbs. of baggage. With full fuel landing speed is 52 mph.

Engine and Design—The plane has been developed by Raymond Weatherly and William Campbell from a design said to have by Don Luscombe and Fred Knack its originators. However it is not to be confused with the four-place personal plane design which the Luscombe Aviation Corp., also at Dallas now headed by Kenneth H. P. Klutz, is developing. The Weatherly-Campbell development is a different airplane. Don Luscombe, who is now operating his own engineering plant in Pennsylvania developed the original Weatherly-Campbell design to meet specifications requirements of the Civil Air Regulations Part 24. Weatherly and Campbell have since re-engineered the basic design to comply with the new CAR Part 24, changing the length pattern on a new tail assembly and increasing the horsepower, as well as simplifying the design for production fabrication economies.

Weatherly-Campbell is now negotiating for production facilities. It is also possible that a new competitor will be formed to do the job, or the design may be sold to an ex-

isting or rough ground, making it suitable for farm and ranch plane use. The door is placed to be easily accessible from the ground. Two front seats have hinged backs for access to rear seat. The three-position steps are manually operated.

Efficient Design—The plane has been re-designed for production with attention to eliminating forced stresses and detail parts, and avoiding use of parts requiring intricate tooling. Flat skin sections and use of standard machinery for fabrications have been design goals. The wing design is not likely to be an overly mass-produced as a more rectangular design, but the simple streamlined wing strut is regarded as a good step toward production economy.

If the airplane is able to hold to the \$5,000 target price, the plane should offer interesting competition to other four-place airplanes now on the market or shortly to enter production.

The price is the lowest quoted on any four-place personal plane. The cost of accessories, such as the Paper Skydiver, experimental aluminum four-place retractable landing gear plane, may not be around \$4,500 if company hopes are realized. It is expected that a considerable number of farmers and ranchmen will prefer a sturdy four-place personal plane with its lack of complexity and no maintenance problems even at the cost of something \$2 mph or more of speed, which could be gained by loading up the gear. These are the people who offer the most potential market for the Weatherly-Campbell plane and others of its general type.



Dallas-Dall Four-Placer—First flight picture of the new four-place all-metal Weatherly-Campbell 140 hp personal plane, built in Dallas, Tex., shows compact taper wing, strut-braced fuselage, landing gear track, and general conventional lines of plane.

Aerona, Piper Tied for Lightplane Production Lead, Survey Shows

Escape from top manufacturers in dollar volume of shipments with \$1,685,000 during August.

With shipments of 186 planes each in August, Aerona and Piper tied for first in the aircraft plane production race, while Engineering & Research Corp., was third with 954, according to data released last week by the Personal Aircraft Council and individual manufacturers.

In dollar volume, Engineering & Research led the field with shipments of \$1,661,900 (on basis as net billing price factory-to-dealer) as compared to Aerona's \$1,632,000 and Piper's \$1,497,000.

First Summary—In the first official summary released by the council, Dr. Hiram Moody, statistical analyst for the Aircraft Manufacturers Association estimated a total of 4,350 planes produced by all personal aircraft makers in August, showing a gain of nearly 1,000 over the estimated total of 3,363 for July.

Unfilled orders for the whole group were estimated at 46,142 for August as compared to 45,142 in July. A summary of shipments and unfilled orders for members of the Personal Aircraft Council and two non-members who reported individually to AVIATION NEWS, follows.

Aerona—Shipped 186 planes

in August, with \$1,423,900 value, as against 203 in July, of \$1,494,000 value. Unfilled orders were 4,402 in August, with \$5,432,900 value, as against 4,109 in July with \$7,194,900 value.

Piper—Shipped 186 planes in August with \$1,467,000 value, as against 170 in July, with \$1,327,000 value. Unfilled orders were 1,895 with \$24,539,000 value, in August, as against 12,370 in July with \$28,100,000 value.

Engineering & Research—Shipped 954 planes in August with \$1,851,000 value, as against 926 in July with \$1,677,900 value. Unfilled orders were 53,420 in August with \$37,220,000 value, as against 51,170 in July with \$36,390,000 value.

Cross—Shipped 967 planes in August with \$1,378,000 value, as against 487 in July with \$1,128,000 value. Unfilled orders were 914 with \$3,110,900 value in August, as against 792 with \$3,551,000 value in July.

Raytheon—Shipped 518 planes in August with \$1,036,800 value, as against 305 in July with \$836,600 value. Unfilled orders were 1,735 in August with \$3,490,600 value, as against 1,930 in July with \$4,930,000 value.



150 HP. JET PROPELLER.

Recent development in MACA's continuing research on the installation of the jet propeller as a future means of lightplane propulsion, is the jet propeller designed to meet a 150 hp engine requirement for a personal plane, above undergoing balance tests at the Cleveland MACA engine laboratory. Reports of the research agency requested (assembly on the jet propeller's future potential, at a recent Langley Field (Va.), conference with industry representatives.

Lascombe—Shipped 384 planes in August with \$450,000 value, as against 169 in July with \$455,000 value. Unfilled orders data not available.



Quay Motor engine. Stall speed of 38 mph, maximum range of 650 miles, and rate of climb of 430 ft. min. are quoted. Baggage compartment shown in interior view, the front and rear right seats may be removed for additional cargo space, or for installation of an auxiliary place. Inter-Tripole gear is mechanically retractable.



THREE-PLACE SWEDISH LIGHTPLANE

The all-metal (except fabric wing-covering) three-place Swift, built by Sweb Aircraft Co., Linköping, Sweden, is described by persons who have seen and flown it as one of the most advanced small personal planes on the market, for passenger comfort and safety. The plane will cruise at 127 mph and has a top speed of 166 mph, cruise a 139 hp DeHavilland

Waco—Shipped 246 planes in August with \$968,600 value, as against 121 in July with \$164,800 value. Unfilled orders were 1,840 in August with \$7,789,800 value, as against 2,305 in July with \$9,480,000 value.

Globe—Shipped 172 planes with \$504,000 value in August as against 158 with \$472,000 value in July. Unfilled orders were 4,736 in August, with \$15,344,800 value, as against 5,972 in July with \$17,291,000 value.

Thompson (Friedrich production)—Shipped 131 planes with \$436,000 value in August, as against 82 with \$313,000 value in July. Unfilled orders were 1,563 with value of \$2,857,000 in August, as against 1,703 with \$3,510,099 value in July.

Elgible—Shipped 39 planes in August with \$95,600 value, as against no planes in July. Unfilled orders were 5,128 in August, as against 5,189 in July, with value not available.

Beech—Shipped 30 planes with \$1,333,900 value in August as against 29 in July with \$1,178,000 value. Unfilled orders were 53 in August with \$3,423,600 value, as against 48 in July with \$3,967,000 value.

Globe Aircraft Makes 111 Plane Delivery

The outstanding mass delivery of 111 light airplanes was made by the Globe Aircraft Corp., Fort Worth, Texas, August 1, the first part of August, and early September to East Coast Aviation Co. of Miami, Globe-Swift distributors for the state of Florida. The delivery included 85 and 125 hp models. The Swift is a two-place, all-metal airplane, with retractable landing gear and hydraulic flap. It is equipped with either standard propeller or constant-speed prop. The 85 hp model, retailing for \$3,400, attains a cruising speed at 128 mph. The 125 hp Swift, which cruises at 148 with fixed pitch prop, or 156 mph with the Beech-Ruby constant-speed propeller, retails for \$4,300.

This mass delivery of Swifts was made available to the Florida Globe-Swift Distributor by the special large-bulk sale of Universal C.I.T. Credit Corporation's new nationwide light aircraft floor planing arrangement for distribution and delivery.

The aircraft were delivered in Texas to East Coast Aviation's

contract Harry Cross, Dennis Perry Service of Ft. Worth, at the rate of three to five ships per day.

Continental Quizzed On Engine Changes

Aircraft Owners and Pilots Association last week led its membership that it had made a second report to Continental Motors Corporation, Houston, Tex., that the manufacturer make full adjustment on engine piston rings required on certain engines by CAA, by providing both parts and labor.

A first report by AOPA had been rejected, the organization said, on the basis that Continental "was unable to believe such a policy would be very satisfactory and a compensated interest on the part of Continental that would rebound against the lightplane business for many years."

Approximately 8,500 engines were involved in the CAA ground-airing order, effective on all planes which have been 30 hours after Aug. 27, until the satisfactory repairs are made. (See AVIATION NEWS, Sept. 21.)

AOPA said the second report was being made after obtaining statements from General Motors, National Association of Manufacturers, American Automobile Association, Automobile Manufacturers Association and others, relative to standard practice on replacements in the automobile industry. They have advised AOPA that it is standard practice to replace faulty parts free of charge and

pay labor charges in most cases when not covered by warranty if the defect is reasonably due to faulty manufacture.

Normally the dealer has absorbed all or part of the labor cost. "In 1941 one major car manufacturer alone paid over \$3,000,000 to correct an engineering mistake and back-bill the product they sold," AOPA reports.

AOPA states that there have been "various instances of liberal practice by automobile manufacturers in protecting the buyer, although there has never before been a question in the automobile industry as to what so large a number of units were involved as in the Continental case."

Court Fight Threatens Airport at Akron

A bitter court fight between residents of a fashionable West Akron Ohio neighborhood, and the city, over a partially completed new Class II airport, James M. W. Chamberlain, has aroused widespread interest in the Akron area.

Approximately 100 residents, including Russell B. Fretz, son of the founder of the Prestolite Tire and Rubber Company, are seeking court action to block the airport's completion. Their opposition is based on the contention that the airport is a hazard to their home and property, and that the noise of airplanes and dust raised on landing and takeoffs is a nuisance.

Chamberlain has been cited by Chamberlain with bond, CAA officials



Globe-Swift Line-up at Miami: With 85 and 125 hp Continental-powered Swifts on East Coast Aviation's flight line on Stinson Blvd. at Miami, James J. Jacobs (center), finance representative of CCA, is shown receiving dealer's floor plan arrangement for Swifts (right) and Frank Hardy of Durrenall C.I.T. Credit Corp. (left) offer

side-gate pilots of three planes, a Lockheed Lodestar, a Beechcraft and a Veevee ST-11, reputedly belonging to the Phoenix Company, which were flown low over the airport repeatedly.

Alvarez, for the property owners and the planes were making a demonstration of the noise and nuisance which would be created when the airport was in use.

Learning up with Chamberlain in his fight is the Akron branch of the Aircraft Owners and Pilots' Association, D. E. (Shorty) Sullivan, Akron municipal airport manager, who drew the field would end-user property owners, and Dr. Theodor Triller, of the Guggenheim Aircraft Institute, who gave expert testimony relating the noise nuisance charge against Piper's aircraft, and George Stone, chairman of the Ohio aviation commission, who sent the field notice was ideal for providing the area with a much needed private flying field and hangar space.

The trial has been resumed for several weeks pending collection of additional evidence.

Brayton Buys St. Louis McDonnell Plant

Purchase of the McDonnell Aircraft plant at Lambert Field, St. Louis, by the Brayton Flying Division, for use as a flight and St. Louis Mechanic school, and parts depot, was announced last week by Clyde E. Brayton, president. The price for the plant was \$90,000. First class of 50 A & K mechanics was started in the new building Sept. 16, and additional classes will be started every five weeks. Brayton has a total of 300 flight and mechanic students in his CAA-approved and Veevee-Adm-Approved school.

Brayton has also signed contracts with War Assets Corp. to provide storage for aircraft parts distribution, and will stock approximately \$100,000 worth of new Jacobs engine parts, tons of all sizes for government surplus planes, and approximately \$500,000 worth of tools and kits.

Brayton is Aerospace distributor for eastern Missouri and western Illinois, and Bell Helms distributor for the St. Louis area. He also holds licenses for Continental, Ranger and French engines, Luscombe, Superse propellers and Beech parachutes.

Briefing For Private Flying

MOONEY DESIGN—As W. Mooney, former Culver Aircraft Corp. chief engineer, and C. G. Yankley, former Culver president are preparing for production a one-place low-wing monoplane for air rental service use, Wacht assures say. The plane will have a manually-operated retractable landing gear and is said to be capable of flying 100 mph, although it is powered with only a 55 hp engine.

DESIGNS FOR SALE—Beagle Aviation Corp. may sell its personal airplane development division lock, stock and barrel and is showing the layout to a number of prospective bidders, cautiously. Detroit aviation firm Consolidated-Veevee appears most interested. The sale would include mechanics, equipment, tools, engineering data, patents, and airplanes already completed (three) in process (14-12 including one prototype four-place amphibian). It is reported some of the top engineers in the division may go along with the division to the company which purchases it. At last reports the field for purchasers was still wide open.

1,300 A MONTH—Piper Aircraft Corp. is pushing to turn out the 1,300th Cub since V-J Day by Oct. 6. If this is done, it would mean a production run of 1,000 planes a month, since the 8,500th Cub was finished Sept. 10. This would make Piper the first personal plane manufacturer to attain this rate, unless its neck-and-neck production rival, Aronson, should make a photo-finish on this completion.

NORWAY BUYS 50 CUBS—McGraw-Hill World News at Oslo, advises that the Norwegian Supply Department has given the green light to the Norwegian Aero Club for purchase of 50 used Piper Cub training type planes from the U. S. Foreign Liquidation Commission for \$20,000, at an average rate of \$400 a plane. The planes, now in France, are to be repaired and overhauled at Kristian Sandness near Copenhagen, before delivery in Norway. Col. Ernst Bekken is heading the purchasing organization.

FRIEDLANDER AND SLEEPER—John Friedlander, Aronson president, and Gordon Sleeper, Republic personal plane sales manager, have been nominated respectively as chairman and vice-chairman of the Personal Aircraft Council, Aeronautics Industries Association, subject to annual at the council's next meeting in November at Cleveland during the National Aircraft Show. Friedlander has been vice-chairman, and is slated to succeed William T. Piper, Sr., president of Piper Aircraft Corp., retiring chairman.

IN-LINE ENGINE—Canaan Aero Engine Corp., of Reading, Pa., has announced development of a new in-line four-cylinder air-cooled aircraft engine which develops 125 hp at 2500 rpm, and 110 hp at cruising rpm. (2000). The manufacturer asserts that no other engine produces so much power with the same low weight and frontal area. Weight is approximately 110 lb. per horsepower in weight. Other features: magnesium alloy cowling, integral cylinder and head to keep cylinder weight low, Stromberg injection carburetor, internal air cooling of cylinders, through an exclusive design feature, in addition to the usual cooling by external cylinder fins, split-stroke pistons in upright or inverted position with minor changes.

500 FOOT WARNING—Civil Aeronautics Board safety bureau is publishing a warning to flyers about abuse of the "law of common sense" in regard to low flying. The bureau warns that the statute 500 ft minimum had been weakened, to permit aircraft to be flown lower for utilitarian purposes, such as surveys of stock, pipelines, hunting, pest-killing, aerials, mail pickup and cross country or local flying under low ceilings where no surface obstruction would exist. It was observed that an increasing number of crashes since the change in the regulation indicates that many pilots think the change gave them an open invitation to fly low and recklessly. The bureau warns that the government has no desire to penalize the large number of legal flyers for the rash acts of a few illegal ones, but that more restrictive regulations may follow unless the reckless flyers voluntarily mend their ways.

—Alexander McClellan



The Warren McArthur Corporation is the recognized leader in the design and manufacture of highly specialized seating equipment for every purpose in all types of airplanes . . . Fifteen years of precision design from aluminum and magnesium, constant research and test, produced the lightest, strongest seating yet conceived . . . Innumerable problems confront engineers of future planes . . . design for payload, passenger comfort, for ease of movement, convenience and environment . . . Experience acquired in the development of more than 300 designs, for 37 leading companies, entitles Warren McArthur to that leadership now happily accorded.

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PRODUCTION

Northrop Trimotor Pioneer Design Is Aimed at Export Markets

Cargo plane scheduled to make first flight in November; Jack Frye codified with idea to develop rugged freight carrier.

Design of Northrop Aircraft's Pioneer—while novel enough with its three engines and fixed conventional landing gear—in particular were suggested as an indication that the Pioneer is perhaps the first U. S. aircraft ever built primarily for the export market.

Northrop claims the spectacular three weight take-off and landing runs of the aircraft (780 and 750 ft.) will make it useful on any present U. S. airfield. [AVIATION NEWS, Sept. 16.] This and other characteristics should make it attractive for service to many out-of-the-way places in this country.

Export Markets—However, the circumstances surrounding the design strongly suggest that the Pioneer is pointed specifically at the markets in Central and South America and in China. Inasmuch as the plane will not fly until November, there is some significance being attached to the timing of the announcement of the plane. Just when the British-built Bristol Freighter was making a big splash in this country preparatory to a "hot-shipment" sale through Central and South America.

While the payload of the two planes is roughly the same (approximately five tons) and the quoted cruising speed in the same neighborhood (118-124 mph), there is no comparison in loading or take-off runs. The Freighter is supposed to sell at about \$125,000 at the factory, while the Pioneer probably will be more costly, but there is grave doubt as to whether U. S. manufacturers whether the Freighter can actually be sold for that price at a profit and without a government subsidy.

Leading strength is the belief that the Pioneer is aimed at the export trade in the fact that Northrop and technicians are to do cargo tests in Central America. Acting as extra crew members, these technicians will be the limit of runways, 1,200 ft. in a mile, the

average top between fields, 35 mi., and the beating the landing gear back on rough fields.

Frye's Idea—Northrop credits the idea for the Pioneer to "concessions which the head of a U. S. airline held some months ago with LaMotte T. Cobb, chairman

of the board. From other sources it is indicated that the entire head is Jack Frye, TWA president, who has been pushing the idea of such an aircraft because of TWA's controlling interest in TACA Airways which operates in Central and South America in some of the ruggedly hilly country in the world.

TWA's interest in a plane of the Pioneer type goes back several years. In Dec. 1943, vice-president, engineering, J. C. Franklin disclosed to AVIATION NEWS designs of several airplanes the line was studying for postwar use. One of these was of a high-wing trimotor of the same general configuration of the Pioneer. This had tricycle landing gear whereas the Pioneer has fixed, conventional (Continued on page 28)



Trimotor Cargo Plane: Northrop Aircraft's Pioneer, conventional passenger and cargo transport, shown in artist's sketch and in mockup designed specifically for use as rugged carrier, it has a high payload, fixed landing gear and exceptionally short take-off and landing distances. Prototype is nearing completion.

Once Again...*PAN AMERICAN* Pioneer.

Here's the kind of long-range, high-speed nonstop service that America is looking for



New, million-dollar Clippers to offer new luxury comfort of Pursuit-Plane Speeds . . . nonstop Coast to Coast, border to border

You who travel by air know how much faster you can reach distant destinations today than you could just a few years ago.

Yet even with the fine equipment offered by the airlines of 1946, today's demand for still faster, nonstop transcontinental schedules direct to the Coast cannot be met.

Pan American—the pioneer U.S. air-

line in long-range flying development, has been taking practical steps to meet today's demand.

Next year, assuming that authorization is obtained from the Civil Aeronautics Board, Pan American will put into operation an entirely new kind of Clipper which will offer nonstop Coast-to-Coast flights at Pursuit-Plane Speeds! Other high-speed, long-range schedules will be offered too (please note map below).

The "Clipper Robinson" (shown above) and her sister ships will be the fastest planes ever to offer commercial flights.

Later, by more than 100 miles per hour than any transport plane in service today. They will be comfortable, too, with more luxurious interiors, sound-proofed and air-conditioned to provide long-range comfort at high altitudes.

Pan American first to offer these planes!

Nine years before any other U.S. airline, Pan American bought and operated four-engine planes. Again, foreseeing the need for still better equipment in the postwar era Pan American was the first to place orders for planes of this type . . . and will be the first to receive them.

Surprisingly enough, the cost of this pursuit-plane-speed type of air travel will be actually lower than present Coast-to-Coast and other transcontinental fares.

A PIONEER COMES HOME!

In line with the Government's postwar policy which provided U.S. domestic airlines to operate abroad and which would permit the pioneer airlines to operate domestically. Pan American's national schedule, should we so fortunate as to be Pan American will be able to provide high-speed, nonstop air to between distant cities within the United States. This map shows the proposed routes which will bring to the domestic field the "trans-america" air travel program, and the competitive spirit which has helped Pan American win first place for America in the international field.



Think what flying times like these will mean to you—for business, for pleasure!

EAST-BOUND

Pacific Coast
to New York . . . 27½ hours
to Baltimore . . . 25½ hours
to Washington . . . 25 hours
to Boston . . . 24½ hours
to Chicago . . . 24 hours
to Detroit . . . 23½ hours

Gulf Coast
to New York . . . 27½ hours
to Baltimore . . . 25½ hours
to Philadelphia . . . 25 hours
to Boston . . . 24½ hours

WEST-BOUND

Because of the 3 hour difference between Eastern and Pacific Coast Time, you'll be able to—

Leave a New York ladies breakfast—have lunch in Los Angeles, or San Francisco, or Seattle. The same will be true West-bound at Boston, Philadelphia, Baltimore, Washington, Detroit, or Chicago.

NORTH—SOUTH

Chicago
to New Orleans . . . 2 hours
to Houston . . . 2½ hours
to Miami . . . 2½ hours

New York
to Miami . . . 5 hours
to New Orleans . . . 2½ hours
to Houston . . . 4 hours

PAN AMERICAN WORLD AIRWAYS



Firestone *Announces* The **NEW SKY CHAMPION**



Wider, Flatter Tread with Deeper Non-Skid... Stays Safer from Overhaul to Overhaul

FIRESTONE, pioneer and pace-maker, is first again — this time with a new, improved aircraft tire that stays safe from overhaul to overhaul, avoiding costly delays. The new Firestone Sky Champion features the new, wider, flatter Safi-Grip Tread for safer braking, better steering control on the ground and longer non-skid life.

Safi-Sured Construction assures extra strength for the hardest

landings. Light weight permits extra pay load.

New Firestone Sky Champions are now available in sizes that fit landing wheels, nose wheels and tailwheels on most types of planes. They are especially effective for tricycle landing gears. For complete information phone, wire or write Firestone Aircraft Company, Akron, Ohio; or Los Angeles, California.

Live in the Pace of Firestone every Monday evening, over N. B. C.

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ROCKET BEECH
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Starting Model
O-435-10-1
1400 HP

No matter what plane
you buy specify Power by
Lycoming—for economy,
reliability and long life.

LYCOMING
AIRCRAFT ENGINES



Lycoming Division, Dept. C-7, The Aviation Corporation, Williamsport, Pa.



Passenger Holds Large cargo space available in the new Northrop plane is shown in this photo, together with the single cargo door on the right. When used for passengers, there is space for 20 people.

gear which is considered more rugged and easily maintained in operating under conditions to be met in "backwoods" areas.

Lower Costs—The trimmer installation was deemed upon by TWA, an about the same built used by Northrop. A two-engine aircraft must be able to fly with one engine out. This means both engines must be high-powered to give proper reserve for such a three-engine plane, engines of lower power can be used because with one out, the combined output of the two remaining is sufficient for flight.

The advantage comes from lower fuel consumption and lower operating costs with the smaller engine. Economizing this the Pioneer is designed for either three Wright 480 hp or three Pratt & Whitney 490 hp engines. A feature of the Pioneer's engine installation is that the power plants are interchangeable.

Pisceski Helicopter Corp. Plans \$500,000 Plant

Work has begun on a \$500,000 engineering and manufacturing plant at Springfield, Delaware County, Pa., for Pisceski Helicopter Corp. Building is expected to be ready early next Spring.

Located on a 33-acre site about 18 mi. southwest of Philadelphia the plant will contain 60,000 sq. ft. A two-story administration and engineering building will contain 18,000 sq. ft. while an adjoining long, one-story manufacturing building will contain 43,000 sq. ft.

Founded in 1946 as the P-V Engineering Forum, the company previously has occupied rented quarters in and around Philadelphia. Presently it is located at Riverside Avenue in Shrewsbury. Pisceski has a number of engi-

neering and production contracts with the Army and Navy, necessitating the construction of its own plant. One Navy contract is for the engineering of the XH-40-1 (PV-14), another for production of the HRP-1 (PV-3), a tandem rotor transport-type helicopter. Deliveries are to be made within two years. An AAF development contract is for a large utility transport helicopter designated the XR-16 (PV-15).

De Havilland Aircraft Nets \$409,277 During 1945

De Havilland Aircraft of Canada, Toronto, reports a net profit for year ended September 30, 1945, after income and excess profits taxes, of \$409,277, equal to \$10.62 per share. The company with a net profit of \$123,332 or \$3.29 per share for 1944. Current assets during this period amounted to \$9,370,753 as compared with \$7,617,143, and current liabilities of \$7,445,510 as against \$8,710,696, with working capital totaling \$1,925,243 as against \$96,507 in 1944.

P. C. General, vice-president and managing director, states that control of its affairs was returned to the company from the Dominion government on April 30, 1946, and an agreement was signed on the same date settling the terms under which the war contracts are to be terminated and the company re-established.

Gleim Martin Employment Reaches 18,000 to Top Field

The Gleim L. Martin Co. now employs 18,000, largest in the airplane manufacturing industry, and the backlog has climbed to \$190,000,000, up \$10,000,000 since mid-August, the company has announced.

Settlements of terminated war contracts have been completed covering approximately \$500,000,000 worth of war orders. Presently under development or in production at Martin are 21 plane types, including the P3M, P3M-5A, AM-1 Mauler, KR-45, 2-6-2, 2-4-3, JRM-3 and conversion of C-76s. Navy contracts for the AM-1 multi-purpose bomber are understood to cover 98 planes.

Martin's engineering and technical employees number 2,417, but because of the volume of experimental work for both Army and Navy that figure will be increased to about 3,000.

Note:
Manufacturers are invited to write or telephone our offices, the Texas Engineering and Manufacturing Co. for their products for them.



C-47
AIRPLANES AVAILABLE
for Immediate Delivery

Our competent workmen have converted these C-47 airplanes to standard or cover specifications. 21-passenger accommodations and luxurious interiors, similar to major airline planes. Texas Engineering and Manufacturing Company processes a huge staff of skilled specialists, seasoned in precision work during war-time, now one of the largest manufacturing organizations in the Southwestern United States.

- Million square feet of floor space
- Complete Manufacturing setup
- Taper Rolls • 300-ton Mincer Presses
- 2,000-ton Hydro-Press
- Eric & Sheridon Striking Machines
- Aircraft Manufacturing
- Aircraft Conversion: C-54, C-47, AT-11, AT-7
- Aircraft Maintenance and Overhaul
- Integral Tank Scheduling Facilities
- Sheet Metal Work of All Kinds
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TEXAS ENGINEERING & MANUFACTURING CO.
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Dallas 2, Texas

French Aircraft Industry Pushes Production for Export Markets

Nationalized plane factories turning out trainers, jets, jets-on-bores and trolley bus bodies in addition to aviation products. Semi-military orders cut by 1,700 planes

Paris (McGraw-Hill World News)—French aircraft industry, caught in the midst of part private and part government ownership, with its technology still not recovered from the wartime lapse, is endeavoring to catch up with world development but its designs to far exceed that it will be some time before French planes will be an important factor in export trade.

Government policy is to go after foreign markets and, as previously reported, French planes have been demonstrated in Argentina and Chile—with 100% results. Overall, the transport aircraft the French industry has to offer are modeled along lines of proven U. S. types, but without equivalent power or performance.

► **Use Breguet**—For the greatest export demand in transport type—a combination piston-turbo prop plane able to get in and out of rough, rough fields in preliminary stages—the best the French apparently have to offer at present would seem to be the NC-162. Based on German design, this is a low-wing, low-wing monoplane powered by Breguet and hp. engines. With a gross weight of more than six tons, it has a cruising speed of 262 mph, and top speed of 317 mph.

The first NC-162 built recently completed a 16,704-mile African flight during which it once landed and took off on a short emergency strip in the jungle. It used only 3,528 ft. of the 1,768 ft. runway.

The most likely looking of the larger French transports is the BE-161, named "Langendoc." This plane is in production and the first have been delivered to Air France, which has ordered 25 for delivery this year. Powered by four Gnome-Rhone engines which give it a total of 4,280 hp, the BE-161 carries a maximum of 35 passengers and a ton of freight. 540 sq. miles. 100-115 passengers and a ton of freight, its range is 2,000 mi. Cruising speed is 230 mph.

The Langendoc is an all-metal low-wing monoplane with a span 118 ft. and length of 94 ft. Gross weight is 43,320 lb. It has twin

radars and conventional retractable landing gear.

► **Half-and-half**—Much of the industry's difficulties, aside from those occasioned by the war, are due to the fact it is partly state-controlled and partly free. In 1938, the five major manufacturers were put under state control. After the liberation, this control became outright nationalization. The other airplane and engine plants were nationalized and divided into the "Societe Nationale de Constructions Aeronautiques de Nord (Nord), Centre, Sud-Ouest (Southwest), and Sud-Est.

Most manufacturers of parts and components are still privately-owned. This has resulted in practically a complete absence of standardization. There are also different landing-gear systems, each with its own research staff. Not only does each new plane generally have a specially-designed landing gear, but sometimes one new model of a plane may be produced with as many as four different versions of landing gear.

This multiplicity of designs for equipment is so widespread that



MITROHS IN THE MAKING:

Ghomer Aircraft Co. is in full production of the jet-propelled Meteor as evidenced by their mass production line. A newer version of the craft that presently holds the world's speed record will have shorter wings and presumably higher speed. (Wide World photo)

original fabrication and eventual replacement of parts become a lengthy and difficult process. An investigation of this matter has been undertaken by the Centre company, and two of its efforts have recommended creation of a National Air Equipment Bureau to coordinate research and standardize equipment.

► **Non-Air Products**—In the face of a shortage of refinery aircraft orders totaling 1,700 off the original number of planes, the aircraft plants have been turned to producing other goods in order to keep workers and facilities busy. Present employment is 35,500—compared to 528,800 in 1940.

The Communist Minister of Armament, Charles Tillon, under whose jurisdiction the nationalized aircraft factories fall, has put them to manufacturing of goods either on subcontract or directly for market. As a result, a French airplane factory is apt to present a mixed appearance.

At the Suresne plant of the Sud-Ouest company (formerly the Fuzan works), the same great shops where SO-600s, SO-9s and BE-27s are being produced has a section fabricating light metal bodies for trolley-buses. In the plant's carpenter shop household furniture is being built. Other plants produce tractors, buses, pots and pans, light-metal kitchen lockers and other furniture.

A possible index to the state of French transport and development is the SO-8000, a small jet plane.

MORE GPM



WITH THIS NEW BENDIX-PACIFIC 3000 PSI HYDRAULIC SELECTOR VALVE

THESE REMOTE CONTROLS AVAILABLE WITH BENDIX-PACIFIC VALVES



Electric activation with remote for remote control



Pilot operated with remote for remote control



Electric activation with remote for remote control

High flow capacity is an outstanding feature of this new Bendix Pacific 4-Way Selector Valve. Although the valve is rated at 6 GPM under Specification AN-V-4, it can handle considerably greater flows without excessive pressure loss. The valve weighs only 2.18 pounds, thereby contributing to system weight reduction while efficiently handling high rates of flow.

Like other Bendix-Pacific 4-way valves, this new valve also can be used with any of the three methods of remote control activation shown on the left, thus permitting the possibility of complete standardization of hydraulic valves in a given airplane.

Complete data on any Bendix Pacific hydraulic selector valve will be furnished on request.

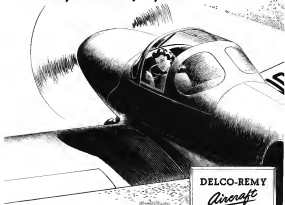


Pacific Division

Bendix Aviation Corporation

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"It's as easy as starting my car!"



Now that Delco-Remy electrical equipment is available on popular makes of light airplanes, you can enjoy electric starting, with all its ease, speed and safety. During flight, the Delco-Remy generator recharges the battery and provides ample current for lights, radio and accessories. Delco-Remy equipment has proved its quality wherever wheels turn or propellers spin.

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Electric Starting for Convenience and Safety . . . Ample Current for Lights, Radio, Accessories

DELCO-REMY
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WHEREVER WHEELS TURN OR PROPELLERS SPIN

SPECIAL AIR SERVICES

CHARTER NON-SCHEDULED INTRASTATE

Air Freight Bonanza Is Seen In New York Garment Trade

Apparel industry can now provide 6,000 lb. payload for three C-47s daily to Florida and West Coast, study claims

By CHARLES L. ADAMS

Assistance for the air cargo operator who makes profitable runs to Eastern cities with payloads only to go into the red when a return load fails to materialize has been provided in a study of the air freight potential of the New York women's apparel industry distributed recently by Fairchild Aircraft Division of Fairchild Engine and Airplane Corp.

The report—made by Col. L. H. Berlin, Detcom AAFB and Roger Mayhew as part of the New York Metropolitan Shoppers Air Freight Survey—shows that the apparel industry can now provide a 6,000-lb. payload for three C-47s every working day on New York-San Francisco and New York-Florida routes alone.

The report estimates all rates of 99 to 14 cents a ton mile, and with adequate service standards, the probable annual air potential for New York-San Francisco women's apparel traffic is estimated at \$4,000,000 to \$5,511,900 lb. and the New York-Florida business at 1,480,000 to 1,816,500 lb. Greatest concentrations of airfreight support for the San Francisco run occur immediately preceding Easter and Christmas, while the flow to Florida is at its height from November through February.

The maximum air potential of 4,257,500 lb. for both the San Francisco and Florida routes represents less than a third of the \$4,000,000-\$5.5 million apparel volume moving to these points by all transport media. Railway Express currently handles 68 percent of all such shipments from New York.

Prospects for future increases in the airfreight share of total volume are bright, however. The study estimates that eventual air potential—based on payload likely to be available when the pioneering stage of airfreight is over

—is 7,174,800 lb. for both San Francisco and Florida, or nearly half the total flow.

Joint Service Needed—At present, the survey noted, air cargo operators cannot economically provide pickup service on an individual basis to the more than 10,000 manufacturers of women's apparel and accessories in the Metropolitan New York area since the average shipment is small, weighing less than 30 lb. However, joint pickup service, receiving stations, and the use of freight forwarders and consolidators offer solutions to this problem.

Service standards especially store-area pickup and delivery and dependable adherence to schedules are presently more important than rates in shipping the highest-



Ready to Move—Storage is packaging and situations of re-packing after transit have contributed importantly to expanding use of airfreight for women's apparel shipments. Carried on the hanger on specially-designed racks, the dresses above were shipped by Sears, Roebuck and Co. to Kansas City via Slick Airways.

priced 5 percent of women's apparel, the report states. Some shippers already utilizing airfreight refuse to send goods by contract or noncontract carrier because of just unadaptable performance. This business has been shifted to the scheduled airlines.

Best candidates for air shipment in the West Coast and Florida (as well as in other volume) higher-priced dresses, handbags and small leather goods, millinery, underwear, and furs and fur garments.

Advantages Listed—In advancing reasons for using airfreight, the important dress industry said it desired to place new styles on the market more quickly; to get quicker service to retailers to return merchandise quickly so that the manufacturer can restock; to maintain closer inventory control and prevent overstocking; to get up or later-than-expected delivery by the manufacturer, to ship pre-season samples; to meet pre-holiday rushes for promotion and advertising; to parcelize cheap, low-cost merchandise; to stock a store where a style is not selling to another outlet.

Other industry developments—A New York manufacturer, Inc. 3000 Madison Ave. is offering a new service to join in a C-47 to 6000 San Francisco. Fred W. Scott, Agencio, California and other points (Chicago, San Francisco, Los Angeles, Dallas, Houston and Los Angeles) are to be added to the list of New York-DALLAS C-47 routes in operation on its schedule routes. The carrier has 10,000 passenger seats last season.

Contract Air Carriers Association, Miami, received a request from the United States Civil Aeronautics Board that the airline would issue 50,000 non-scheduled seasonal tickets from January to 30 March of this year.

Florida Air Lines, Los Angeles reports the first round-trip daily nonstop Sacramento and Los Angeles and back for Sacramento and Los Angeles service to 2225 passengers on its scheduled schedule operation. The Sacramento-Los Angeles service is operated by the Flightline Airlines operation. The Los Angeles-Sacramento route is operated by the Sacramento-Sacramento route. The Sacramento-Sacramento route is operated by the Sacramento-Sacramento route.

Long Island Airlines, South Plainfield, N.J., has announced that it will operate a daily nonstop service from New York City to Washington, D.C. The service will be operated by the Long Island Airlines operation. The Long Island Airlines operation is operated by the Long Island Airlines operation.

Haven hotel and a complete daily sight-seeing program.

California Eastern Airways, Inc.—Dulled, Cal., will present its year-end operations to the Federal Transportation Commission on August 12 in a report on the CAB. The line has recently stopped (Aviation News-Sept. 2).

Northwest Airlines, Tacoma, Wash. filed suit in the District Court of Oregon to force the Airline Corporation Commission to admit it is a common carrier. Northwest has filed a petition to conduct passengers between Portland and Seattle. Northwest claims the service provided by Airline is a common carrier.

Northwest Generalized Air Transport, Inc.—New Orleans has moved Circuit II to challenge Board of Airline Regulation's order.

Rock Airways, Inc. has filed suit in the District Court of Oregon to force the Board of Airline Regulation to admit it is a common carrier. Rock Airways, Inc. has filed suit in the District Court of Oregon to force the Board of Airline Regulation to admit it is a common carrier. Rock Airways, Inc. has filed suit in the District Court of Oregon to force the Board of Airline Regulation to admit it is a common carrier.

Fish-Spotting Norseman Flies Off Oregon Coast

Continuing its experiment in opening schools of fish from the coast, the California River Fisheries Association has signed a contract with A. D. Frank, pilot, and Robert Vance, navigator, both of Vancouver, Wash., making the port the area of fishing fleets off the Oregon coast.

Flying a Nordnor Norseman, Frank and Vance detect the fishing fleets by light and gizzard schools by side. Frank's flights have been on an oval fish class to the surface indicate the presence of the schools.



CHALLENGE TO SCHEDULED CARRIERS:

Burred from scheduled transportation by CAB's decision is the Latin American route case, this Western Airlines DC-4 has been used in non-scheduled flights to Puerto Rico, Mexico and England. With its completion for a temporary New Orleans-San Juan certificate scheduled for hearing this week, Western will be able to use its scheduled DC-4 operations so good that it is fit, willing and able to conduct the Caribbean service. At least two certified carriers, Pan American and Chicago and Southern, have indicated belief that the Waterman Steamship Corp subsidiary may be collecting the non-scheduled regulations.

Paper Drop Tests

Reliability and essential tests showing the feasibility of dropped bundles of newspapers from the air without damage, were conducted recently by Pan-Maryland Airways, Baltimore, at the request of Baltimore's Sunpapers. Airways loading both of Baltimore's evening papers to North-Hatch Beach, Del., for further distribution by truck to nearby coastal points. Pan-Maryland will be asked by the Sunpapers to make drop delivery runs to shores of other counties which lack coast-to-coast airports.

Twenty-four bundles of papers were dropped from the tests from 30 to 300-ft heights with the plane traveling at around 90 mph. Between four and five papers weighing less than three pounds to 30 papers weighing almost 30 lbs, the bundles were either undamaged or tied with rope or wire to determine the best method. Only two of the 24 bundles were undamaged and some fell were lost in the tests which indicated that drops from 100 to 200 ft were preferable to those from lower altitudes.

Third C-47 Expected

Trans-Pacific Airline, Ltd., Honolulu, which recently led the Hawaiian Islands, expects delivery on a third C-47 by

the end of October. Company has asked CAB for immediate leasing on its application for scheduled service in the territory.

Transair Buys Firm To Expand Services

Transair, Inc., New York, one of the nation's largest fixed-line passenger carriers, has expanded its operations to include general sales, maintenance service, overhaul and conversion of aircraft and engines, and training services following acquisition of Aero Industries Corp., New Haven, Conn.

Buying of the two companies' flying equipment brings total aircraft under Transair ownership to 23, including one DC-4, ten DC-3s, one Douglas B-26, four Lockheed Electras, one Lockheed Lodestar, two twin-engine Comets, one Stratum and 14 assorted training planes. With the acquisition of the Transair, all of the aircraft will be used in passenger charter service.

Transair plans to move its new maintenance plant from Newark Airport to New Haven Municipal Airport where Aero Industries' hangars and maintenance and conversion shops have been in operation since January. Conversion of heavy planes will continue at New Haven under Transair management as well as repairs for small airline operators. The flight school will be expanded to handle 100 students, and under a War Assets Administration contract Transair will act surplus aircraft parts in the New Rochelle area.

Air Carriers Listed

An alphabetical list of approximately 500 air carriers who filed reports with CAB under Section 292 (1) of the Economic Regulations prior to the Sept. 3 deadline has been prepared by the Board's Operations Division. The compilation, which includes the carrier's address and type of service (cargo, passenger, or both), may be obtained from CAB's Public Information or Publications Section.

British Charter Group

England's air charter operators have formed the British Air Charter Association, a national organization, to give their more efficient means of cooperating in solving problems and to act as a mechanism to protect their interests.

TRANSPORT

American Mid-Continent Merger Is Rejected by CAB As Unsound

Board says eventual disadvantage to nation's air transport system outweighs immediate benefits through mail pay savings.

American Airlines' proposed union of several of Mid-Continent Airlines has been turned down by CAB with a long-term observation that immediate benefits through mail pay savings might be offset by eventual disadvantages to the nation's air transport system as a whole.

In this pulling immediate savings to the government secondary to sound development of the country's air network, the Board declared that "it does not necessarily follow that it might be more advantageous to the nation to bear a greater burden in mail pay in order to achieve levels of an air transportation not otherwise obtainable."

Future Not Bright—The Board also found that MCA's future was not as bright as American had asserted it, and expressed the hope that the carrier may prove itself economically sound "provided, of course, that Mid-Continent's management will give the carrier the benefit of their whole attention to its development from the long-range point of view, as an operating ability rather than a marketable asset."

Mid-Continent was immediately questioned in connection with development of its present route Pres J. W. Miller, forecasting probable future expansion of operations to range to high-paying markets, and the purpose of the merger proposal was to afford MCA territory-approved service "and this Board must acknowledge expanding MCA operations." *

American's chairman of the board, C. E. Smith, said the deal would have brought about immediately increased service, lower passenger fares and decreased mail rates, had the Board's decision had been favorable. American's opportunity to provide those services, all of which AA believes are in the public interest.

Fare reductions, as far as it would reach, three or more direct routings, showed as marked gain, and again "there is reason to believe, as the recently lettered instances of Mid-Continent, that this carrier would be able to succeed as public the benefits of some lower fares.

Mail Route Key—The preferred reduction in mail rates brought the Board "in grips with the underlying theory of American's case." American showed that application of its mail rate to Mid-Continent for the year ending Sept. 30, 1946, would have saved the government \$124,337 in mail pay for that year since CAB had no doubt that the consolidated system "would stand apart from the rest of our air transport system," would cost less in mail pay over the next few years, at least, than the two systems would if MCA remained independent.

But the Board said if reduction of MCA's subsidy meant requirement of higher subsidies by a few carriers "we should be questioning our own policy of public economy. And analysis showed that the merger proposal might seriously threaten the economic foundation of other carriers' aid against the possibility of greater demands by them on the public treasury.

Furthermore, the Board pointed out that the CAB "never would permit the MCA-Cleveland, without becoming an adjunct of the



Planned for Philadelphia—Construction of this \$12,500,000 air terminal at Philadelphia's Southwest Airport will start next spring, according to Airways Engineering Consultants, Inc., of Washington, designers of both the terminal and airport project, which together will cost over \$26,000,000. Terminal will include a large international building flanked by domestic operations building with second overhead built covering the peripheral operations structure with the central terminal. Later will contain hotel, restaurant, motor pools, private health and customs offices. The airport itself, with an operations capacity of about six times Washington National Airport's present capacity, will have four miles of parallel runways. Construction of the airport will start the fall.

American system, will gradually overcome its present comparatively large dependence upon outside supply through mail poth.

Route Consolidations Sanctioned by Board

American, United and TWA per case in cost saving subcommittee. Young objects to PCA warning.

End-year route consolidations sought by four major domestic airlines—American, PCA, TWA and United—have been sanctioned by CAB in a move to improve passenger service and permit administrative and operating economies by the carriers.

The Board consolidated American's routes 4, 16 and 22 into one route (AM 4); PCA's routes 24 and 28 into a single route (AM 14); TWA's routes 1, 26, 27, 41, and 61 into a single route (AM 2); and United's routes 1, 62 and 66 into one route (AM 1).

New Newcomer—A number of cities which had previously been terminal points on two separate routes of the same carrier will now be intermediate points on the airline's consolidated route. Not only will it be scores of new non-stop services and improved efficiency from four-engine equipment, now the old terminal points can now be bypassed on through flights.

To prevent anomalous competition, the Board restricted the route consolidation authorizations so that PCA may not operate Chicago—Cleveland, Chicago—Albion, Chicago—Youngstown or Chicago—Pittsburgh nonstop services except

on flights originating or terminating at Washington or Norfolk. TWA will not be permitted to operate Chicago—Washington or Chicago—Boston nonstop except on flights originating or terminating at Kansas City or points west. United will also be barred from Chicago—Washington or Chicago—Boston nonstop except on flights originating or terminating at Omaha or points west.

Schedules Limit—New routes made possible by CAB's action include Boston, New York and Washington to Los Angeles (American and TWA), Boston, New York and Washington to San Francisco (United and TWA), Washington to Chicago (PCA), and Washington—Boston (American). Board Member Clarence M. Young dissented from the portion of the decision permitting a Chicago—Washington nonstop for PCA and will file a separate report later.

CAB took special note of the significant increase in average speeds and the decrease in direct flight costs of DC-4 and Constellation equipment on longer legs. Signer American had estimated that DC-4 direct flight costs decrease from 34 cents a mile for 200-mile flights to 49 cents for 400-mile flights and 45.8 cents for 800-mile flights. TWA estimated that average Constellation block to block speeds increased from 145 mph on 100-mile flights to 269 mph on 1,000-mile flights.

Seek Feeder Lines

A South African government note calls for private enterprise proposals for feeder air services

Pickup Combination

The modernized passenger and pickup services for which All American Airlines has applied to CAB was demonstrated in a Washington ceremony with one of the carrier's Lockheed D-18C, equipped in carry line programs and pickup equipment.

Members of the Board and its staff, Post Office officials and others were taken on the demonstration flight which included pickups at Clinton, Md., and Alexandria, Va.

to supplement travel routes now operated by South African Airways. The Government, it is understood, intends to operate a feeder network similar to Constellation, where private operators may take out licenses to operate services on certain routes.

Official Probes To Begin On Air France Crashes

Official inquiries have been started into two fatal Air France crashes that occurred within two days last month. One, on the Copenhagen-Paris line near Copenhagen, killed 22. The other, at departure of the Paris-London plane from Le Bourget field, cost 20 deaths.

Both planes, which apparently suffered engine trouble, were Douglas DC-3s. Air France announced that the London plane had been removed only in July, had flown 493 hrs., and had just been overhauled.

The line explained that it regularly overhauls engines on its DC-3s every 30 hrs., instead of the 75 hrs. recommended by the manufacturers. The planes fly only 3 to 4 hrs. per day.

Air France emphasizes that from Jan. 2 to Sept. 1 it had carried 158,890 passengers, 212,000 free passenger-miles with only one fatality.

Seek Airport Funds

City officials from 27 states meeting at Rait Worth in final session of a Public Works Administration, evolved to ask Congress for funds next year to construct air fields and airports. The group also will urge the armed forces to return former army-owned airfields to municipalities.

Air Mail Growth Seen in New Rates

Plan case in foreign charges on Nov. 1, helicopter pickups begin at Chicago as Sullivan slashes new postal system.

Interest in airmail was renewed last week by organizational and operational developments that made the new lowered 8 cent postage rate just one of several important trends toward growth in the branch of the postal service.

Major significance attached to reorganization of the Second Assistant Postmaster General's branch, which effected agreement between the postal air force and postal ground forces through creation of the office of deputy second assistant in charge of air postal transport. The job went to Robert S. Shugart, who had been superintendent of the division of airmail service.

Foreign Rate Cut—Almost simultaneously with that action came announcement that rates were proposed in airmail rates from the U. S. to all foreign countries. Present rates, varying according to country, will be succeeded by a uniform rate for each continent.

Announcement of the reduction is to come officially during National Air Mail Week, which starts Oct. 27. Genl. Sullivan, Second Assistant Postmaster General, said

in discussing the plan that new rates on mail on would be 12 cents to South America, 10 to Europe and North Africa, 25 to South Africa and 25 to Australia and Asia. The cuts are scheduled to take effect Nov. 1, one month after the domestic reduction from 8 to 6 cents an oz.

Postal officials said it was still too early last week to give the effect of the domestic cut, although advance stamp sales were heavy. Commerce was that same of the three "young post offices" (Spain by American, TWA and United) to come under the custom (Airmail News Sept. 30) would give regular service, though the carrier was seen as a possibility.

Regulation Change—Regulations must be changed and, according to one source, legislation obtained before postal clerks could be authorized on planes. Weight of the clerks, it was said, would be partly affected by elimination of a good deal of lightly-lifted equipment. Handling of the mail in the air would remain that possible would be made up for planes, instead of for each city served directly.

Department officials are confident that no parcel post will be introduced by the next Congress, possibly in January, and will have what one described as "almost definite possibilities." Plans devoted exclusively to mail and parcel post, and outfitting with landing facilities, may follow.

Meanwhile, the Department, with cooperation of the Air Transport Commission, is conducting its second helicopter experiment. This time in the Chicago area. Tests were made previously at Los Angeles. When the trials started Oct. 1, deliveries were made on each of those suburban roads out of Chicago serving altogether 43 non-airline mail destinations. The work, which will continue through the end of the month, showed that air mail made on the three routes in the afternoon about a week or so.

Optimistic View—Both the Department and the airlines were optimistic in results to be expected from the new airmail program (see Airline men expressed confidence that it would bring volume back to its wartime size. Some predictions were that it would increase 25 to 100 percent in six months. Northwest Airlines forecast its own mail loads would be up 100 percent within two months and 200 percent in six.

Sullivan, in a speech at Chicago forecasting a future air postal operation in which flight post offices doubling major route areas would be the nucleus, supplemented secondary routes on the present system and feeder routes to small communities, the latter with helicopters and pickup planes.

The Second Assistant Postmaster General has been working since last year to achieve the reorganization of his office recently effected. Immediately under him,



BOAC AIRPORT BUS

Powered with either gasoline or diesel engines, passenger coaches such as that shown above at Atlanta airport, Ga., are being used by British Overseas Airways Corp. Paris for the vehicles, which carry 20 passengers, are standardized for easy maintenance all over the world. Right- or left-hand drive is available as required.



Looking to Aircraft's Future—Two recent trends of airmail transportation development are illustrated above. The two interiors are of TWA's cargo Douglas DC-4 (right) and the C-47 Fairchild Packet (left). Seen by United to make integration of the 2 cent airmail postage rate. Both were outfitted for the occasion with moving racks, work tables and the usual mail room paraphernalia and manned by mail clerks.



clerks. TWA, United and American participated in several flight to test airplanes to the loaded rate. Center picture shows Genl. Sullivan, Second Assistant Postmaster General, as he climbed from an All American Airlines demonstration flight, ready to show the feasibility of the combination post-passenger carrier for which the best, long the nation's only air pickup carrier, has applied.

see the WAR ASSETS ADMINISTRATION



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The harness and pack are attached to the pack by a line to the back, the smooth pack for no protrusions or bulging, and the pack on the surface.

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All parachutes used in civil aircraft must be inspected and repacked by a licensed inspector or rigger. (Contact nearest CAA office concerning a licensed rigger or inspector.)

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Sea "C" type 14" canopy	0300-679113	61.00	49.00	
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- Washfield Aircraft Company, Inc.
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Cincinnati 32, Ohio

(For three years, ever since Aviation News was established, this page has carried the opinions of the editor. The reader knows me as a "weaver." This week's editorial are gathered from the mail. For the sake of interest, it is regrettable that Mr. Tracy's use of the role bracket received in recent weeks—Robert H. Wood.)

"Weak Thinking . . ."

Your editorial hitting at the National Air Races was a weak bit of thinking by an aviation man who should realize that general public opinion of aviation is one of the most important of those, regardless of whether or not technical gains are measurable.

From 1939 to 1938, you will agree, racing planes did contribute to aviation development. Trace the origin of landing flaps. How can judgment be passed on whether the new metal propeller designs of value after only one season? Granted—there seems to be in the game from racing green fighters, but give the boys a little leeway. Have you checked with Bill Stoutness as to what they learned from Westons' total crash? Any NACA engineer will admit that in spite of his elaborate laboratory results, final results are obtained from actual flights.

Don't fail to consider that half the participants in the Thompson are never test pilots for all major manufacturers—working out of their own parlors—so that their own test pilots "had" pilots. They're engineers and capable of throwing an idea or two into a plane's performance when not handicapped by company officials with "book learning."

Perhaps you overlooked the fact that the races are just on for the mainstay layman, not for the industry. And who provides the cash to operate NACA and the military air arm? Isn't it worth an aerial show to keep up the interest of the guy with the pocketbook?

Sensible thinking would give little consideration to the number of "pioneers" who might attempt to duplicate the ideas they saw at the races as the Cals, etc. All people flying airplanes today aren't "unwieldy" and you should give the current generation of pilots more credit for having "air sense" than you give generation to date. Statistics indicate that average flying proficiency—including judgment—is higher now than ever before.

CHARLES L. TRACY, Aviation Editor
Cleveland, Ohio

Limousine Survey Underway

Your recent editorial comment, "Mediocre Limousine Service" (Sept. 16), is most timely. Carey Airport Service, Inc. has engaged the services of a competent engineering firm, Edwaco Services, Inc., headed by Mr. P. D. Simmons, formerly head of the Highway Transport Division of the QUT—for the purpose of making a complete survey of its operations in Metropolitan New York serving LaGuardia and Newark Airports.

A detailed analysis will be made of its present fare structure under current operating conditions with recommendations as to how a reduction may be effected. The survey will include, on a basis of the proposed figures for the entire Metropolitan airport system (LaGuardia, Newark, Westport and Idlewild) for the next five years, the size of equipment to be

used and the possibilities of a further drastic reduction in ground fares.

The tremendous expansion of airline operations after the cessation of hostilities last year has presented some very trying problems for most of the limousine operators throughout the United States. These problems involve their inability to secure any equipment from the automobile manufacturers, particularly equipment large enough to accommodate the terrific demand placed on their services.

I fully agree with you on your comment that limousine service has deteriorated noticeably and can hardly say that if the proper size equipment were available, drastic reduction in ground fares would be available. In this connection, our company is making a concerted effort, in spite of the adverse conditions so regards equipment, to determine whether any concessions can be obtained which could be passed on to the traveling public.

JOHN F. CAREY, President
Carey Airport Service, Inc., New York, N. Y.

Better Limousines Coming

We all read with great interest your article on the editorial page Sept. 16, "Mediocre Limousine Service" offering better equipment to give faster and more efficient service to our modern airports today a ruff down our alley. I'm certain you have seen the photograph of my new Avionette Club coach (No. 5) appeared in your July 15 issue. . . . Within the next 90 days, this type will be in operation at the larger airports such as Los Angeles, Chicago, Detroit, New York, Pittsburgh, Knoxville, Memphis, Atlanta, and Miami. Operations at other major airports have this coach on order and our problems elsewhere is up to most at the larger centers will have some of the Avionettes in service in the first quarter of 1942.

Mr. Carey of Carey Airport Service, New York City, and president of Airline Ground Transportation Service, Inc. had our pilot tested in operation for one hour, and reports that it is giving him excellent service, plus plenty of customer satisfaction.

J. B. FULLER, Sales Promotion Manager
The Flexible Company, Leokessville, Ohio

Outlaw Stunt Flying

After reading those little paragraphs about GE Jac cutting the feet off the P-51 and eight feet off the P-63 in preparation for the National Air Races, I wondered who would be first in the aviation magazine field to comment. Well, you did it, but I don't think you have done hard enough.

Your editorial was good, but why didn't you go all the way and state it all bluntly? I am thinking now of the little country air show. Somebody stands a finger, like Bevo Howard, and many kids with 50 cents decide that they can do it too. Some of them do it and the next few about them is an ordinary to the local paper. Why don't you write an editorial that the day for making aviation by showing how dangerous it is has long passed?

When we begin to show what the airplane can do rather than how it should not be used, we shall begin to make sense properly.

F. D. WAGNER, Editor of the Popular
Fairchild Engine & Airplane Co., Inc.



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We have a very lively little flying warbird man who goes to work... through the clouds.

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You find that we've taken the trouble to manufacture and deliver a plentiful supply of UNLEADED 88 octane gasoline to all "Globe" airport groups. So when this gasoline can mean to you—in terms of better performance and a cleaner engine!

Happy flying! Hope to see you soon!



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The performance, dependability and ruggedness of Beechcraft products prove the progressive ability of Beechcraft to build airplanes that are outstanding in their class.

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Harrington Air Service, Mansfield, Ohio
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Ohio Aviation Company, Dayton, Ohio
Pacific Aircraft Sales Co., Oakland, Calif., Burbank, Calif.

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Pittsburgh Aeronautical Co., Homestead, Pa.
Plains Airways, Cheyenne, Wyo.
J. D. Reed Company, Houston, Texas
Southern Air Services, Memphis, Tenn.
Southern Airways Sales Co., Inc., Atlanta, Ga.
Southwest Aviation Service Corp., Oklahoma City, Okla.

Topeka Aircraft Sales & Service, Topeka, Kan.
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Roscoe Turner Aeronautical Corp., Indianapolis, Ind.



Model 18 The Beechcraft seven-to-nine place executive transport is a familiar airplane on airports in all parts of the world. Its sturdy, dependable performance and the flexibility of seating and cargo arrangements make it ideally adaptable for executive personnel or as an air carrier. Design and performance permit operation from small landing fields.



Model 17 The Beechcraft Model 17 biplane provides the discriminating personal or sportsman pilot an airplane of beauty and speed. Pilot and four passengers are able to ride in roomy comfort at 200 miles an hour. Negative wing stagger, an exclusive Beechcraft feature, affords clear visibility and ready cabin entrance.



Model 35 The new Beechcraft Bonanza cruises at 175 mph, consumes 10 gallons per hour, carries four 170-pound people and 100 pounds of baggage, lands at 46 mph. Its range is 750 miles at 165 mph. It has a direct operating cost of as low as 1 cent per passenger mile. It's delivered complete for day, night and instrument flight.

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